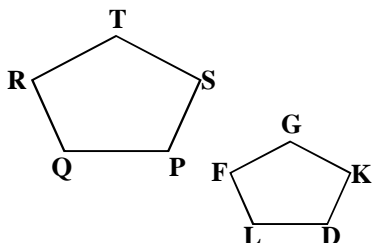


Chapter 6 – Similar Figures

1. Pentagon RTSPQ is similar to pentagon FGKDL. Complete the similarity ratio below.



$$\frac{RT}{FG} = \frac{PS}{\quad}$$

2. Solve for x.

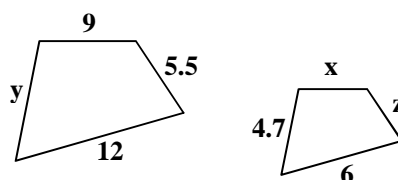
$$\frac{5}{8} = \frac{x}{12}$$

3. Solve for x.

$$\frac{3x-5}{4} = \frac{-5}{7}$$

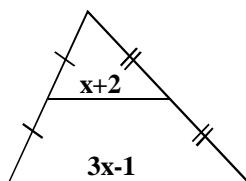
4. The ratio of the measures of the sides of a triangle is 6:7:9. The perimeter is 154. Find the sides.

5. The two polygons are similar. Find x, y, and z.

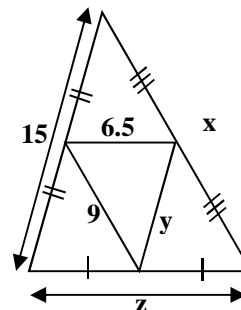


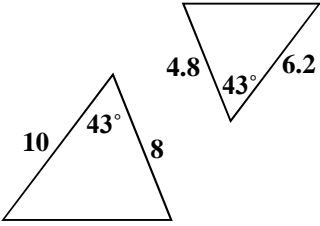
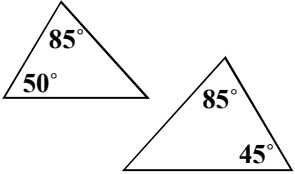
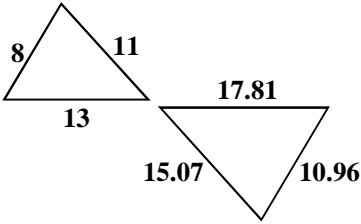
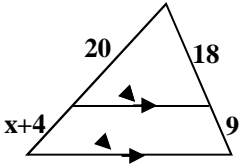
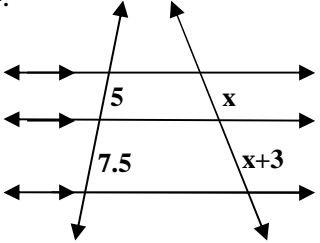
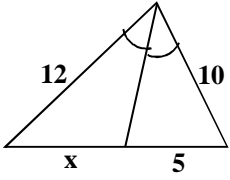
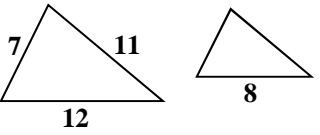
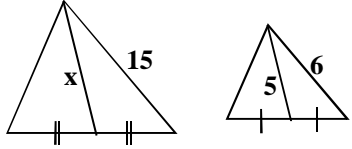
6. Explain the difference between similar and congruent.

7. Solve for x.



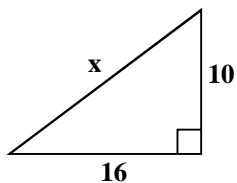
8. Find x, y, and z.



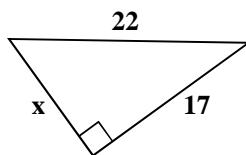
| | | |
|--|---|---|
| <p>9. What are the three ways to prove that triangles are similar?</p> | <p>10. Are the triangles similar? If so, by what postulate.</p>  | <p>11. Are the triangles similar? If so, by what postulate.</p>  |
| <p>12. Are the triangles similar? If so, by what postulate.</p>  | <p>13. Solve for x.</p>  | <p>14.</p>  |
| <p>15. Solve for x.</p>  | <p>16. The triangles are similar. Find the perimeter of the smaller triangle.</p>  | <p>17. The triangles are similar. Solve for x.</p>  |

Chapter 7 – Right Triangle Trig

1. Solve for x.



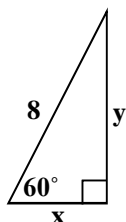
2. Solve for x.



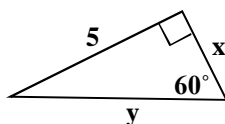
3. Can the following be sides of a right triangle?
Do the numbers form a Pythagorean triple?

$$4, 4\sqrt{3}, 8$$

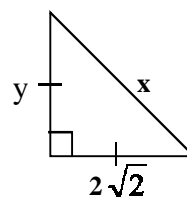
4. Solve for x and y.



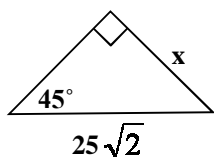
5. Solve for x and y.



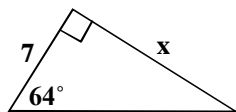
6. Solve for x and y



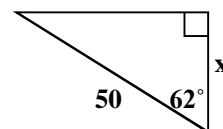
7. Solve for x.



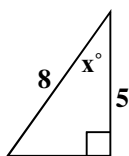
8. Solve for x.



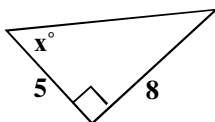
9. Solve for x.



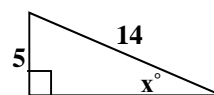
10. Solve for x.



11. Solve for x.



12. Solve for x.



13. A meteorologist measures the angle of elevation of a weather balloon as 41° . A radio signal from the balloon indicates that it is 1503 meters from her location. How high is the weather balloon above the ground?

Chapter 8: Properties of Quadrilaterals

1. Find the sum of the interior and exterior angles of a regular octagon.

Sum Interior: _____

Sum Exterior: _____

2. Find the measure of **ONE** interior and exterior angle of a regular 20-gon.

One Interior: _____

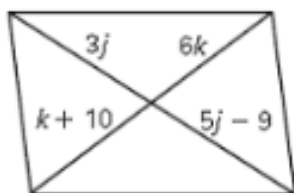
One Exterior: _____

3. Find the measure of **ONE** interior and exterior angle of a regular decagon.

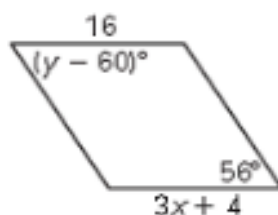
One Interior: _____

One Exterior: _____

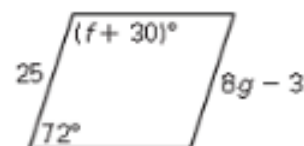
4. Find the value for the variables in the following parallelogram.



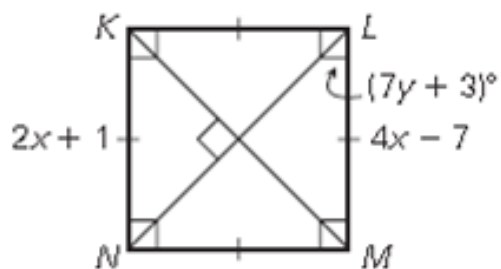
5. Find the value for the variables in the following parallelogram.



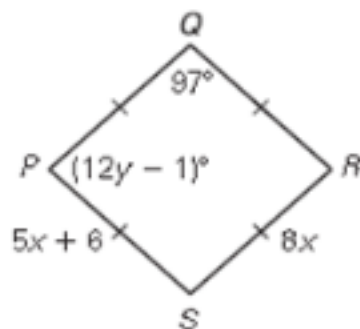
6. Find the value for the variables in the following parallelogram.



7. Classify the following quadrilateral and use that information to solve for the variables.



8. Classify the following quadrilateral and use that information to solve for the variables.



9. Name each polygon:

3 sides _____

8 sides _____

4 sides _____

9 sides _____

5 sides _____

10 sides _____

6 sides _____

12 sides _____

Chapter 10 - Circles

1. Identify each part of the circle.

a. Name:

g. \overleftrightarrow{HJ} :

b. \overline{AB} :

h. Pt. A:

c. \overline{CD} :

i. Pt. E:

d. \overleftrightarrow{GF} :

j. $\angle BAE$:

e. \overline{CE} :

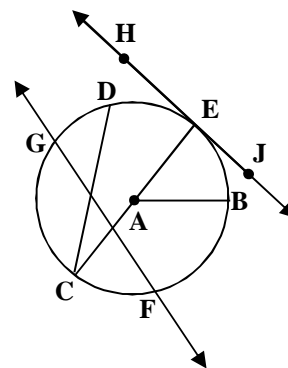
k. $\angle DCE$:

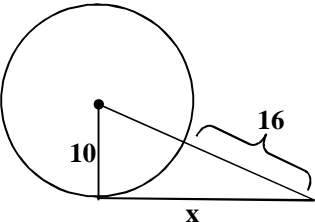
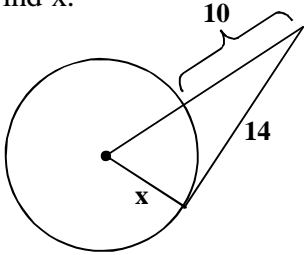
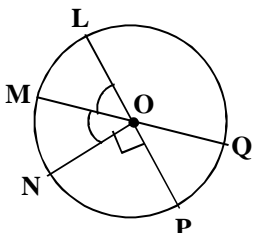
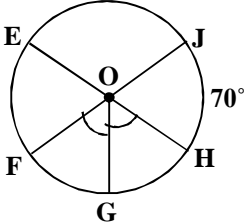
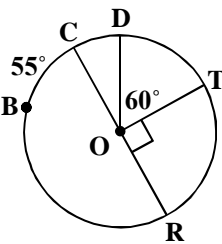
f. \overleftrightarrow{FG} :

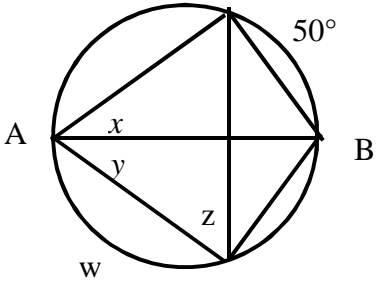
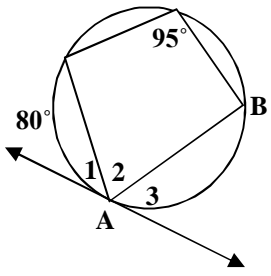
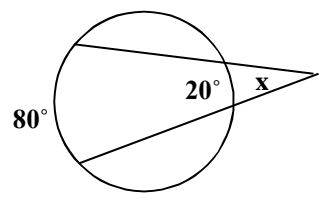
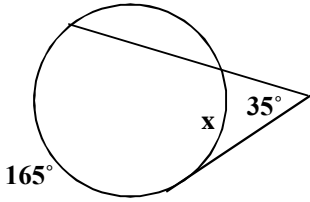
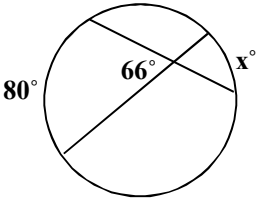
l. Arc BF :

m. Arc BEF :

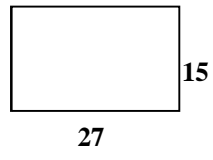
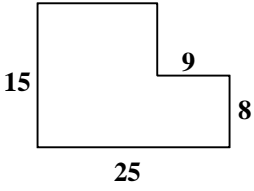
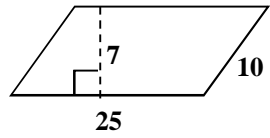
n. Arc EGC :

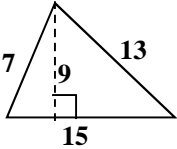
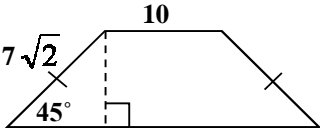
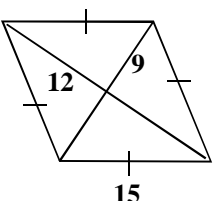
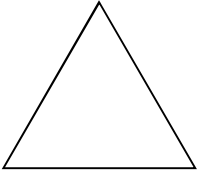
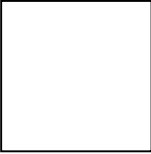
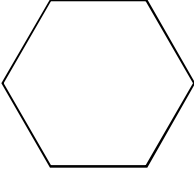


| | | |
|---|--|--|
| <p>2. The radius of a circle is 6 cm. How long is the diameter?</p> | <p>3. The diameter of a circle is 15 ft. How long is the radius?</p> | <p>4. The radius of a circle is 13 cm. Find the circumference, in terms of π.</p> |
| <p>5. The diameter of a circle is 35cm. Find the circumference to the nearest tenth.</p> | <p>6. The circumference of a circle is 24π in. What is the radius?</p> | <p>7. The circumference of a circle is 37.7 in. How long is the diameter.</p> |
| <p>8. Find x.</p>  | <p>9. Find x.</p>  | <p>10. You are making a circle graph for your project. What is the measure of the central angle for a category that is 37%?</p> |
| <p>11. Find each measure.</p>  <p>a. $\angle LOM$:</p> <p>b. arc QP:</p> <p>c. arc PMQ:</p> <p>d. $\angle QOL$:</p> <p>e. arc QLP:</p> <p>f. arc LN:</p> | <p>12. Find each measure.</p>  <p>a. $\angle EOF$:</p> <p>b. arc EJH:</p> <p>c. arc FH:</p> <p>d. $\angle FOG$:</p> <p>e. arc JEG:</p> <p>f. arc HFJ:</p> | <p>13. Find each measure.</p>  <p>a. arc TR:</p> <p>b. $\angle COD$:</p> <p>c. arc BT:</p> <p>d. arc BR:</p> <p>e. arc BTR:</p> <p>f. arc TRB:</p> |

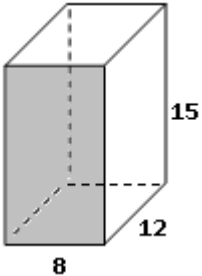
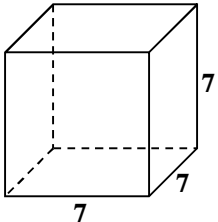
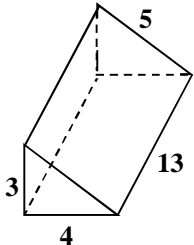
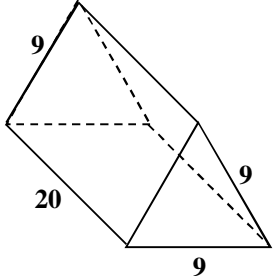
| | | |
|--|--|---|
| <p>14. Solve for the variables</p>  <p>a. $w =$ _____</p> <p>b. $x =$ _____</p> <p>c. $y =$ _____</p> <p>d. $z =$ _____</p> | <p>15. Find each angle measure.</p>  <p>a. $\angle 1$</p> <p>b. $\angle 2$</p> <p>c. $\angle 3$</p> <p>d. arc AB</p> | <p>16. Find x.</p>  |
| <p>17. Find x.</p>  | <p>18. Find x.</p>  | <p>18. What is the center and the radius of the circle with the equation:</p> <p>a. $(x-8)^2 + (y+7)^2 = 25$</p> <p>center:</p> <p>radius:</p> <p>b. $(x+2)^2 + y^2 = 17$</p> <p>center:</p> <p>radius:</p> |

Chapter 11 – Area and Perimeter

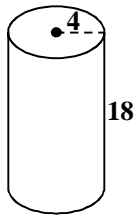
| | | |
|--|--|--|
| <p>1.</p>  <p>Area:</p> <p>Perimeter:</p> | <p>2.</p>  <p>Area:</p> <p>Perimeter:</p> | <p>3.</p>  <p>Area:</p> <p>Perimeter:</p> |
|--|--|--|

| | | |
|--|---|---|
| <p>4.</p>  <p>Area:</p> <p>Perimeter:</p> | <p>5.</p>  <p>Area:</p> <p>Perimeter:</p> | <p>6.</p>  <p>Area:</p> <p>Perimeter:</p> |
| <p>7. Find the area of a equilateral triangle with a side of 9 cm.</p>  | <p>8. Find the area of an square with a side of 8 cm.</p>  | <p>9. Find the area of a regular hexagon with a side of 6 cm.</p>  |
| <p>10. Find the area of a circle with a diameter of 14 cm.</p> | <p>11. Find the area of a regular octagon with a side of 10 ft and an apothem of 12.1 ft.</p> | |

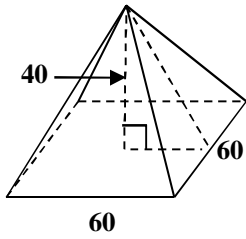
Chapter 12 – Surface Area and Volume

| Figure | Lateral Area | Surface Area | Volume |
|---|--------------|--------------|--------|
| <p>1.</p>  | | | |
| <p>2.</p>  | | | |
| <p>3</p>  | | | |
| <p>4.</p>  | | | |

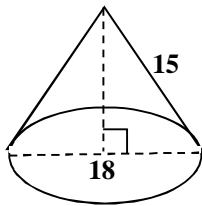
5.



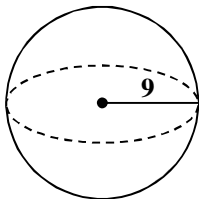
7.



10.



11.



No
Lateral
Area